



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/672,990

09/26/2003

Jae Jin Lee

CU-3374 RJS

9771

26530

7590

09/30/2004

LADAS & PARRY LLP
224 SOUTH MICHIGAN AVENUE
SUITE 1200
CHICAGO, IL 60604

EXAMINER

NGUYEN, LINH M

ART UNIT

PAPER NUMBER

2816

DATE MAILED: 09/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/672,990

Applicant(s)

LEE, JAE JIN

Examiner

Linh M. Nguyen

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☒ Claim(s) 3-8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/24/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claims 1-8 are presented in the instant application according to the Applicant's filing on 09/26/2003.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Abstract

2. The abstract of the disclosure is objected to because of the use of a non-positive and conditional term "if". It is suggested that the term "if" in lines 7, 9 and 12 be replaced with "when".

Appropriate correction is required.

Claim Objections/Minor Informalities

3. Claims 1, 3 and 7 are objected to because of the following informalities, it is suggested to replace "if" with "when" in order to reflect positive and non-conditional limitations:

Claim 1, lines 9 and 11;

Claim 3, lines 13 and 19; and

Claim 7, lines 1 and 8.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2816

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Igura (JP Patent No. JP411068559A).

With respect to claim 1, Igura discloses, in Figures 9 and 14a-b, a DLL (Delay Lock Loop) circuit which synchronizes an external input clock [RCLK] applied from an outside of a system with an internal input clock [SCLK] used inside the system using a divider unit [5], the DLL circuit comprising a detection unit [2, see solution, line 2] for detecting whether a pulse width of the external input clock is narrower than a reference set value; wherein the divider unit outputs a first divided signal [SCLK] when it is detected that the pulse width of the external input clock is wider than the reference set value, and outputs a second divided signal [SCLK] when it is detected that the pulse width than the reference set of the external input clock is shorter than the reference set value.

With respect to claim 1, Igura discloses, in Figures 9 and 14a-b, that a pulse width of the first divided signal is narrower than a pulse width of the second divided signal.

Allowable Subject Matter

6. Claims 3-8 would be allowed if corrected to overcome the objection set forth in this office action.

7. The following is a statement of reasons for the indication of allowable subject matter:

The closest prior art on record does not show or fairly suggest:

A delay lock loop circuit, in which when the period of an output signal of a buffer means does not exceed a first delay time, a detection means outputs second logic level, and a divider

Art Unit: 2816

means outputs a signal having a frequency obtained by dividing the frequency of the output signal of the buffer means into $\frac{1}{2}^{M+1}$, in combination with the remaining claimed limitations, as called for in claim 3; and

A delay lock loop circuit, in which a third delay unit for delaying an output signal of a second delay unit, in combination with the remaining claimed limitations, as called for in claim 6.

Citation of Relevant Prior Art

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Prior art baron et al. (U.S. Patent No. 5,327,103) discloses a lock detection circuit for a phase lock loop.

Prior art Townsend et al. (U.S. Patent No. 5,323,423) discloses a receive side pulse width controlled adaptive equalizer.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh M. Nguyen whose telephone number is (571) 272-1749.

The examiner can normally be reached on Alternate Fri, Monday - Thursday from 7:00 to 4:30.

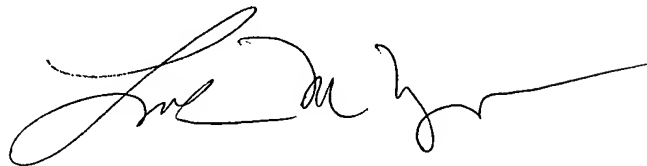
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2816

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LMN

**LINH MY NGUYEN
PRIMARY EXAMINER**

A handwritten signature in black ink, appearing to read 'Linh My Nguyen', with a long horizontal flourish extending to the right.